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## ABSTRACT

The Child and Adolescent Functional Assessment Scale (CAFAS) provides information on psychological impairment, including a score for the child's overall functioning as well as scale scores for eight psychosocial areas: school, work, home, community relationships, moods, self-harmful behavior, substance use, and abnormal thinking. This symposium presents two papers which describe uses of the CAFAS in Tennessee and Missouri. The first paper is: "CAFAS: Evaluating Statewide Service" (Craig Anne Heflinger and Celeste G. Simpkins), which summarizes findings of 1994 and 1995 data collection efforts using CAFAS for 846 children and youth in Tennessee state custody. It found the CAFAS provided a cost-effective mechanism for evaluating children's needs and appeared to be valid. The second paper is: "The Utilization of the Child and Adolescent Functional Assessment Scale for Assessing Program and Clinical Outcomes, Mental Health Policy, and Child Outcomes in Missouri" (La Vonne Daniels and Lisa Clements). This paper summarizes findings of a Missouri statewide study assessing outcomes for 458 children and families receiving either residential or outpatient/day treatment. Using CAFAS, differences were found between the two groups on age, services received, diagnosis, severity of impairment, and substance use. (Contains 10 references.) (DB)

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## Symposium:

### Utilization of the Child and Adolescent Functional Assessment Scale (CAFAS) for Assessing Program and Clinical Outcomes

#### Authors

#### Introduction

CAFAS: Evaluating Statewide Service, Method, Results, Discussion, References

The Utilization of the CAFAS for Assessing Program and Clinical Outcomes, Mental Health Policy, and Child Outcomes, Method, Preliminary Findings, Discussion, References

## Introduction

The Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 1990) provides information on impairment which can be used to shape the course of clinical care and policy decision-making. It provides for child's overall functioning score as well as scale scores for eight psychosocial areas (i.e., school/work, home, community relationships, moods, self-harmful behavior, substance use, and abnormal thinking). The CAFAS is currently being used to describe the service needs of youth in care and to assess outcomes. In Tennessee, an innovative program sponsored by the Tennessee Commission on Children and Youth uses the CAFAS to assess a sample of all youth in the state's custody, served by protective services, mental health, juvenile justice, or educational programs. The first stage of an outcome study being conducted on youth served by the Department of Mental Health in Missouri is also presented.

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## CAFAS: Evaluating Statewide Service

Craig Anne Heflinger & Celeste G. Simpkins

The Child and Adolescent Functional Assessment Scale (CAFAS: Hodges, 1990) was used to measure psychosocial functioning for children and youth in state care as part of the Children's Plan Outcome Review Team (C-PORT). The C-PORT is conducted by the Tennessee Commission on Children and Youth (TCCY) as an evaluation of the service system for children in custody of the State of Tennessee.

The C-PORT was initiated in 1994. This report summarizes the findings of the 1994 and 1995 data collection efforts of child psycho-social functioning that included 846 children and youth ages 3 to 21 years of age. For the overall C-PORT findings, see TCCY (1996).

### Method

#### *Sample*

The C-PORT uses a proportional stratified sample design. There is a base population of approximately 12,000 children in custody at any given time being served by any of 14 Assessment and Care Coordination Teams (ACCT). Within each ACCT region, cases are assigned to one of 27 categories based on age (birth - 5, 6 - 12, and 13 or more years), current placement type (family home, foster home, or group placement), and adjudication type (dependent/neglected, unruly, or delinquent). Cases were randomly selected from each of the 27 categories, based on the proportion within the ACCT region population.

The resulting sample for 1994 was 357, and for 1995, it was 674, for a total of 1,031 children and adolescents (see [Table 1](#)). The CAFAS was completed for 283 children in 1994 and 563 in 1995. The characteristics of the CAFAS sample for 1994-1995 are shown in [Table 1](#). The majority of these youth were 13 years old or over (68%), white (69%), male (57%), dependent/neglected (61%), and lived in a foster home (38%) or group residence (39%).

#### *Source of Data*

Data were collected by C-PORT staff from record reviews as well as interviews with the child, primary caretaker, parent (if different from the primary caretaker), and teacher (if appropriate) from a sample of children in custody of the state of Tennessee.

#### *Measurement Instrument*

The CAFAS (Hodges, 1990) is an interviewer-rated instrument used to measure children's functioning across five domains: role performance, thinking, behavior towards self and others, moods and emotions, and substance use.

self and others, moods and emotions, and substance use. Two additional subscales describe the current caregiver's ability to provide for the youth's material needs and for his or her emotional/social needs. The CAFAS has demonstrated good interrater reliability (Hodges & Wong, 1996) and validity (Hodges & Gust, 1995; Hodges & Wong, in press) and is currently being used by numerous states to describe children receiving state funded services and in the Center for Mental Health Services national evaluation of system of care demonstration projects.

The CAFAS was completed at the end of a case review and interview, based on information from the structured interviews and case reviews of the C-PORT protocol. Training on completion of the CAFAS was conducted by staff of the Center for Mental Health Policy at Vanderbilt University. Descriptive statistics were used to develop a profile of the CAFAS sample and functioning levels of the youth as well as to describe the 1994-1995 differences.

## **Results**

Measures of psychosocial functioning attempt to describe the child's ability or inability to function in his or her community in a variety of age-appropriate ways. Although many of the children were rated as functioning in the average range for their age for specific areas, up to half of them demonstrated some type of impairment in each of the different types of functioning measured. Two-thirds (67%) were rated in need of treatment, in contrast to the approximately 80% of children who were given a positive rating of emotional well-being as part of the C-PORT (TCCY, 1996). That rating of emotional well-being, however, does not attempt to address the actual emotional health or problems of this population but rather whether the service system has identified and addressed those emotional needs if they exist. Therefore, these CAFAS ratings provide the needed descriptive information on just how, and how well, these children and youth in state custody are actually functioning on a daily basis.

The two domains in which the children exhibited the most problems in functioning were role performance (i.e., the effectiveness with which the child fulfills the roles most relevant to his or her place in the community) and behavior toward self or others. Two thirds of the children (66%) were rated as impaired in at least one of the five areas, with half receiving impaired ratings in two or more areas. Overall, the CAFAS scores indicated the following treatment needs for the population of children and youth in state care: (a) 33% in need of supportive intervention; (b) 30% in need of short-term treatment (likely on an outpatient basis); (c) 25% in need of more intensive services likely in excess of six months; and (d) 12% in need of intensive services and likely needing some type of services on a longer term basis.

Over half (53%) of the children had a formal mental health diagnosis reported, and of these, many were also rated with moderate or severe impairment in psychosocial functioning.

moderate or severe impairment in psychosocial functioning. Using the twofold definition of the Tennessee Department of Mental Health and Mental Retardation that requires both of these documented problems to be classified as seriously emotionally disturbed (DMHMR Priority 2), 29% of the children could be so classified.

The proportion of children and youth, categorized by custodial department, with moderate or severe impairment indicating need for more intensive or longer term mental health services were: Department of Mental Health and Mental Retardation (83%), Department of Youth Development (58%), Tennessee Preparatory School of the Department of Education (41%), and Department of Human Services (32%).

The relationship between child age and psychosocial functioning was found to be significant with younger children (less than 6 years of age) demonstrating less impairment. In both of the two older age groups, 6 - 12 years and 13 or more years, substantial levels of impairment were reported. Significant differences were also found for gender (i.e., males were reported as having more psychosocial impairments). Race of the children was also examined, but no statistically significant differences were found (see Table 2).

The type of residence in which the child or youth currently was placed was also found to relate significantly to the level of impairment of the children and youth in all areas. Children in group placements scored as significantly more impaired (mean CAFAS 43.1) than children in family (mean 28.5) or foster (mean 20.2) homes. Also related to the child's placement, the child's level of functioning impairment was found to be significantly higher when he or she had experienced a greater number of placements (see Table 3). In other words, the children who had the most instability of placement were those with the greatest problems in their ability to function on a daily basis. The children who had been in their current placement for the shortest amount of time were those with the greatest psychosocial functioning impairment. These were frequently the children who had been in multiple placements so that the placement at the time of the C-PORT interview was shorter than the children who were functioning better and staying longer in their placements.

In addition, the relationships between CAFAS ratings of psychosocial impairment and the C-PORT ratings of child and family status and system performance were examined. The predicted relationships between better (less impaired) functioning and positive emotional well-being, positive educational/vocational progress, and progress achievement was found to be significant. In contrast, children and youth with greater impairment in psychosocial functioning were found to be more likely to receive negative status ratings in emotional well-being or educational/vocational progress or inadequate status in progress achievement.

inadequate status in progress achievement.

The CAFAS also provides a rating of general caregiver functioning. The ability of the current caregiver to provide for the basic needs of the child includes provision of food, shelter, clothing, medical care, and safety. The social resources of a family or the current caregiver are also critical to child development. Almost all (95%) of the current caregivers were rated as providing basic material resources and meeting the physical and safety needs of children in state custody, and 82% were rated as providing necessary emotional and social support to meet the child's developmental needs.

## **Discussion**

Several additional comments are needed regarding the performance of the CAFAS in the C-PORT reviews. First, it is obvious from the above findings that the inclusion of the CAFAS provides much more information about the functioning of the children and youth in state custody than reliance on the single child characteristic of emotional well-being (positive vs. negative status). The CAFAS provides a relatively cost-effective mechanism for allowing in-depth description of the needs of children in state care in the domains of their daily functioning including: (a) role performance at home, in school, and in the community; (b) clear thinking and thought processing; (c) behavior towards self and others; (d) moods and emotions; and (e) substance use. Second, the CAFAS results reported above "make sense," which is important when adding a new data collection method, in that the results correspond to other evidence from family members and caseworkers who have described the problems and needs of these children. Thus, the validity of the CAFAS in this setting is supported.

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## **The Utilization of the Child and Adolescent Functional Assessment Scale for Assessing Program and Clinical Outcomes, Mental Health Policy, and Child Outcomes in Missouri**

La Vonne Daniels & Lisa Clements

### **Introduction**

This summary describes the initial findings of a statewide study to assess outcomes for children and families served by agencies funded by the Missouri Department of Mental Health (DMH). The study, which is part of a broad based study encompassing mental health, substance abuse, and developmental disabilities services, was funded by the state legislature.

The aim of the study is to assess outcomes for a representative sample of children who receive services in four treatment modalities: (a) residential facilities, (b) acute inpatient facilities, (c) outpatient and day treatment programs, and (d) intensive in-home programs. The design is longitudinal and will measure client functioning at two successive points in time, 6 months apart. The study includes both new admissions and a sample of active clients who are at various points in the treatment process. In addition, discharge data will also be gathered for children served in acute care inpatient and intensive in-home services.

### **Method**

Measures include instruments to assess functional and clinical status of the child, as well as measures of family empowerment and family satisfaction. Instruments for the study are the Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 1990), the parent version of the Child Behavior Checklist (CBCL; Achenbach & Edelbrock, 1991), the Children's Global Assessment Scale (G-GAS; Schaffer et al., 1983), the Family Empowerment Scale (FES; Koren, DeChillo, & Friesen, 1992), and the Family Satisfaction and Needs Questionnaire (Daniels, 1995). In addition, the Admission Checklist for Children and Youth, a DMH form for classifying children as seriously emotionally disturbed or acutely disturbed, and a form for capturing demographic data were also utilized in the study.

The study was implemented October 1, 1995. During the months of October and November, data were collected for all new admissions to the system statewide. Data were also collected for a representative sample of active clients in each of the major treatment settings. Agencies participating in the study include 31 outpatient programs, 4 acute care

in the study include 31 outpatient programs, 4 acute care inpatient programs, 11 intensive in-home programs, and 9 residential treatment programs. Prior to the implementation of the study, sessions were held at 3 locations in the state to train agencies' staff on the assessment instruments and to describe procedures for implementation of the study. Protocols, with instructions and all the data collection forms and instruments, were prepared by Missouri Institute of Mental Health (MIMH) and forwarded to local agencies. Protocols for children included in the active client sample were pre-labeled with identifying information for each child.

## **Preliminary Findings**

As of February 1, 1996, data had been received for 458 children, representing all four target groups. Preliminary analyses have been prepared for two groups, children who were active clients in residential care (N = 56) and children who were new admissions for outpatient or day treatment services (N = 159).

### *Characteristics of Children in Residential Care*

Children in residential care for whom responses were received were primarily Caucasian males (52%) between 13 and 15 years of age (48%). The majority were in the custody of parents (57%), while 30% were in the custody of the Department of Social Services. The primary diagnosis for 20% of the group was conduct disorder, with oppositional defiant disorder and attention deficit hyperactivity disorder accounting for an additional 32% of the group.

The children had high levels of multi-agency involvement. Sixty-six percent were involved with Child Protective Services, and 86% were special education students. Only a small proportion (two percent) were reported to be involved with Substance Abuse Agencies.

### *Characteristics of Children in Outpatient or Day Treatment Care*

Children who were admitted for outpatient or day treatment care during the data collection period were primarily Caucasian males (56%). Sixty-six percent were ages 10-18 years of age. The majority were in the custody of parents (86%). Thirty percent had previously been a client of DMH.

The primary diagnosis for 26% of the group was attention deficit hyperactivity disorder, with oppositional defiant disorder accounting for an additional 20% of the group. The children had some multi-agency involvement; 23% were involved with Child Protective Services, and 30% were special education students. Similar to children in residential care, only two percent were reported to be involved with Substance Abuse Agencies. While primary living setting for children three months prior to data collection was with their

family (86%), 14% also had psychiatric inpatient care within the same time period.

## Discussion

At this point in the study, only descriptive analyses of the data are appropriate. This is especially true since the return rate for the outpatient group is relatively low, and group sizes are very different. However, some differences between the outpatient/day treatment admissions group and the residential active client group can be noted.

Children in residential care were older than children admitted for outpatient/day treatment and were predominantly male. The residential treatment group were much more likely to have been involved with Child Protective Services (66% vs 23%) and much more likely to be receiving special education services (86% vs. 30%). Children in the residential treatment group also had substantially higher levels of multi-agency involvement (75% vs. 30.8%).

Among the residential active client group, 20% of the group had a primary diagnosis of conduct disorder, whereas only 2% of children in the outpatient/day treatment admission group had conduct disorder as a primary diagnosis. In contrast, a primary diagnosis of attention deficit hyperactivity disorder was more likely among the outpatient/day treatment group (26%) than for the residential group (16.1%).

Results of the CAFAS revealed differences between the residential treatment group and the outpatient/day treatment admissions group as well. Although scores for Role Performance indicated that the majority of both groups fell within the severe impairment category, 82% of the residential treatment group compared to 59% of the outpatient/day treatment admissions group scored at the severe level of impairment. The Role Performance subscales scores indicate a substantial proportion of both groups (37.5% for the residential group, 41% for the outpatient/day treatment group) were having severe problems at school or work. However, a far greater proportion of the residential group scored at the severe impairment level on the Home subscale (80%) compared to the outpatient admission group (47%). Although more than fifty percent of the children in both the outpatient and residential groups scored at the "no impairment" level for the Community subscale, the residential group had a greater percentage of children scoring at the severe impairment level for this subscale.

Another notable difference in CAFAS scores for the residential and outpatient groups was on the Substance Use Scale. Children in the outpatient group had a greater proportion of the group scoring at the severe, moderate, and mild impairment levels for the Substance Use scale. No children in the residential group were reported to have

severe impairment levels, while 25% of the outpatient group scored at this level. Four percent of the residential group scored at the moderate level of impairment, while 45% of the outpatient group scored at this level. When considered across impairment levels, 70% of the outpatient group scored in the moderate or severe impairment level for Substance Use.

The data presented above are for only two of the four groups in the study. The next step is to analyze data for the acute inpatient care and intensive in-home groups and to analyze data for the Family Empowerment Scale and the Family Satisfaction and Needs Questionnaire. Also, in the immediate future, follow-up will be initiated to assure that a statistically representative sample is achieved. In April and May of 1996, follow-up data will be collected for the entire population in the study.

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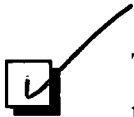


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